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 1)

```java
package java_methods;

import java.util.Scanner;

public class Methods {
    public static void main(String[] args) {
        int num1 = 2;
        int num2 = 7;
        int num3 = 10;

        int smallest = num1;
        int largest = num1;

        if (num2 < smallest) {
            smallest = num2;
        }
        if (num3 < smallest) {
            smallest = num3;
        }

        if (num2 > largest) {
            largest = num2;
        }
        if (num3 > largest) {
            largest = num3;
        }

        System.out.println("The smallest number: " + smallest);
        System.out.println("The largest number: " + largest);
        System.out.println(smallest + " is your smallest number, and " + largest + " is your largest
number.");
    }
}
```


2)

```java
// JavaProjectCalculator.java (main class)
package java_project_Calculator;
```

```java
import java.util.Scanner;

public class JavaProjectCalculator {
    public static void main(String[] args) {
        MarksCalculator marksCalculator = new MarksCalculator();
        marksCalculator.calculateAndDisplayMarks();
    }
}

// MarksCalculator.java (class)
package java_project_example;

public class MarksCalculator {
    private double javaProgrammingMarks;
    private double networkingMarks;
    private double mathsMarks;
    private double averageMarks;

    public void calculateAndDisplayMarks() {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter marks for Java Programming:");
        javaProgrammingMarks = scanner.nextDouble();

        System.out.println("Enter marks for Networking:");
        networkingMarks = scanner.nextDouble();

        System.out.println("Enter marks for Maths:");
        mathsMarks = scanner.nextDouble();

        averageMarks = (javaProgrammingMarks + networkingMarks + mathsMarks) / 3;

        System.out.println("Marks for Java Programming: " + javaProgrammingMarks);
        System.out.println("Marks for Networking: " + networkingMarks);
        System.out.println("Marks for Maths: " + mathsMarks);
        System.out.println("The average is: " + averageMarks);

        scanner.close();
    }
}
```

3)

```java
```

```java
import java.util.Scanner;

public class LeapYearChecker {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Please enter a year:");
        int year = scanner.nextInt();

        if (isLeapYear(year)) {
            System.out.println("The year " + year + " is a leap year!");
        } else {
            System.out.println("The year " + year + " is not a leap year.");
        }

        scanner.close();
    }

    public static boolean isLeapYear(int year) {
        if (year % 4 == 0) {
            if (year % 100 == 0) {
                if (year % 400 == 0) {
                    return true;
                } else {
                    return false;
                }
            } else {
                return true;
            }
        } else {
            return false;
        }
    }
}
```

3b)Java assignment 2

```java
import java.util.Scanner;

public class TriangleAreaCalculator {
    private double base;
    private double height;

    public void getUserInput() {
        Scanner scanner = new Scanner(System.in);
```

```java
        System.out.println("Enter the base of the triangle:");
        base = scanner.nextDouble();

        System.out.println("Enter the height of the triangle:");
        height = scanner.nextDouble();

        scanner.close();
    }

    public double calculateArea() {
        return 1/2 * base * height;
    }

    public void displayArea() {
        double area = calculateArea();
        System.out.println("The area of the triangle is: " + area);
    }

    public static void main(String[] args) {
        TriangleAreaCalculator calculator = new TriangleAreaCalculator();
        calculator.getUserInput();
        calculator.displayArea();
    }
}
```

4)